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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,668	07/15/2003	Dong-Gyu Kim	YOM-0039	7177
23413	7590	08/09/2006	EXAMINER PHAM, HOAI V	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			ART UNIT 2814	PAPER NUMBER

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/619,668

Applicant(s)

KIM.ET AL.

Examiner

Hoai v. Pham

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9,11,12 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7,9,11 and 12 is/are allowed.
- 6) ☒ Claim(s) 20-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 20-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Kong et al. [US 2002/0053701].

With respect to claim 20, Kong et al. (figs. 2-3, cols. 3-4) discloses a thin film transistor array panel comprising:

- a gate conductive layer (26) formed on an insulating substrate (10);
- a gate insulating layer (30) on the gate conductive layer;
- a semiconductor layer (40) on the gate insulating layer;
- a data conductive layer formed at least in part on the semiconductor layer and including a data line (62) and a drain electrode (66) separated from each other;
- a passivation layer (70) covering the semiconductor layer; and
- a pixel electrode (82) contacting the drain electrode,

wherein at least one portion of the semiconductor layer (40) is formed along with the data line, and

a boundary of the semiconductor layer (40) is exposed out of the data line except for places near the drain electrode (66) and an end portion of the data line (62).

With respect to claim 21, Kong et al. (figs. 2-3, paragraph [0058]) discloses that the data conductive layer has a multilayered structure including a lower film and an upper film, and the lower film and the upper film have different shapes.

With respect to claim 22, Kong et al. (figs. 2-3, paragraph [0058]) discloses that the lower film comprises a barrier metal and the upper film comprises Al or Al alloy.

With respect to claim 23, Kong et al. (figs. 2-3) discloses that the data line (62) has an edge substantially parallel to the semiconductor layer (40), the edge of the data line either placed on the semiconductor layer or coinciding with an edge of the semiconductor layer.

With respect to claim 24, Kong et al. (fig. 3) discloses that the pixel electrode (82) has an edge overlapping the gate conductive layer (26), the data conductive layer (66), or the semiconductor layer.

With respect to claim 25, Kong et al. (figs. 2-3) discloses that an ohmic contact (56) interposed between the semiconductor layer (40) and the data conductive layer (66) and having substantially the same planar shape as the data conductive layer.

With respect to claim 26, Kong et al. (fig. 3) discloses that a lateral side of the data conductive layer (66) is tapered.

With respect to claim 27, Kong et al. (figs. 2-3) discloses that the passivation layer (70) has a first contact hole (76) for contact between the drain electrode (66) and the pixel electrode (82), a second contact hole (74) exposing a portion of the gate conductive layer (24), and a third contact hole (78) exposing a portion of the data line (68), and further comprising: a first contact assistant (86) contacting the gate conductive layer (24) through the second contact hole and a second contact assistant (88) contacting the data line through the third contact hole, the first and the second contact including the same layer as the pixel electrode (82).

With respect to claim 28, Kong et al. (fig. 3) discloses that the passivation layer (70) contacts the lower film near the first and the second contact holes (74, 76).

With respect to claim 29, Kong et al. (fig. 3) discloses that a portion of the drain electrode (66) contacting the pixel electrode (82) has unevenness.

Allowable Subject Matter

4. Claims 1-7, 9, 11 and 12 are allowed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoai v. Pham whose telephone number is 571-272-1715. The examiner can normally be reached on M-F.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


**HOAI PHAM
PRIMARY EXAMINER**